



# Standard Farms

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Standard Farms: Company Overview

# Standard Farms Pennsylvania Team



## LEADERS FROM CANNABIS TO INVESTMENT

### Senior Management – Financial Acumen

#### Peter Bio Managing Partner

- CEO at Standard Farms
- Previous: Head of Trading, Wingspan Investment Management
- 15 years investing experience; Sandelman Partners, Mercer Park, & Lazard.
- M.B.A Analytical Finance & Accounting – U. of Chicago, Honors
- B.S. Quantitative Business Analysis – Penn State University, Summa Cum Laude

#### Jonathon Goldrath Managing Partner

- CFO at Standard Farms
- Previous: Senior Analyst, Wingspan Investment Management
- Vice President, Fortress Investment Group (New York, San Francisco, London)
- B.S. Finance & Accounting – New York University Leonard N. Stern School of Business
- Executive Board - Pennsylvania Cannabis Coalition (State Trade Association)
- Board of Directors - Cannabis Benchmarks®

### Standard Farms Operational Team – Real-World Execution

#### Maura Reilly Chief Cultivation Officer

- Extensive previous medical marijuana cultivation experience in a highly regulated market as Cultivation Manager at Theraplant (one of four licensed cultivators in Connecticut).
- Prior to role as CCO worked intimately through all facets of Standard Farms' cultivation operations as Lead Cultivator
- M.S. Exercise Science, Human Performance - Southern Connecticut University.
- B.S. English - University of Massachusetts (Amherst)

#### Kyle Olcott Director of Formulation and Extraction

- Experienced Chemical and Biochemical Engineer
- Production Manager at Colorado Cannabis Company ("CCC"), focused on CO2 based extraction methodologies
- Off-shore Field Engineer at SubOneSea (Oil & Gas, Gulf of Mexico and North Sea)
- Published in the Journal of Chemical Thermo Dynamics
- Research at the Center for Hydrate Research in Golden, CO.
- B.S. Chemical Engineering, Biochemical Engineering – Colorado School of Mines

#### Brian Corr Ph.D. Lead Horticultural Advisor

- Over 40 years of experience in horticulture and agriculture
- President of Sycamore Horticulture Solutions Inc.
- Previous experience includes research, academia, and large-scale commercial operations including; Syngenta, Midwest Invasive Plant Network, Valent BioSciences, Ball Horticultural Company, and PanAmerican Seed Company
- Ph.D. Plant Physiology, Horticulture - University of Minnesota Twin Cities
- M.S. & B.S. Horticulture - University of Illinois at Urbana-Champaign

#### Dr. Bruce Nicholson M.D. Chief Medical Officer

- Two decades of pain management experience
- Medical Director for the Division of Pain Medicine, Lehigh Valley Hospital and Health Network.
- President and Founding Member of the Pennsylvania Pain Society
- Clinical Associate Professor at the Penn State College of Medicine
- Board Cert. in Anesthesiology & Pain Management, American Board of Anesthesiology.
- Principal investigator in 50 clinical trials
- B.S. Virginia Commonwealth University
- M.D. Eastern Virginia Medical School

#### Matthew Bio Ph.D. Chief Science Officer

- CEO & President - Snapdragon Chemistry
- 20 years of pharmaceutical and biochemistry experience – Merck Research Laboratories & Amgen Inc.
- Responsible for the development of over 50 clinical candidates and launch of three new drugs
- Ph.D. Chemistry – Columbia University
- B.S. Natural Sciences – Muhlenberg College

#### Allbriton Robins Chief Marketing Officer

- 13 years of forging partnerships and building brands with some of the world's most iconic and progressive companies
- Creative Director – 72andSunny
- Effie Award (Most Effective Brand of 2016) – Truth Anti Teen Smoking Campaign
- Clients include; Google, LG, Coca-Cola, Pepsi, Dewars, TBS, Target, Allstate, General Mills, P&G and Comedy Central
- Google – Lead designer for Chrome Browser Global Launch

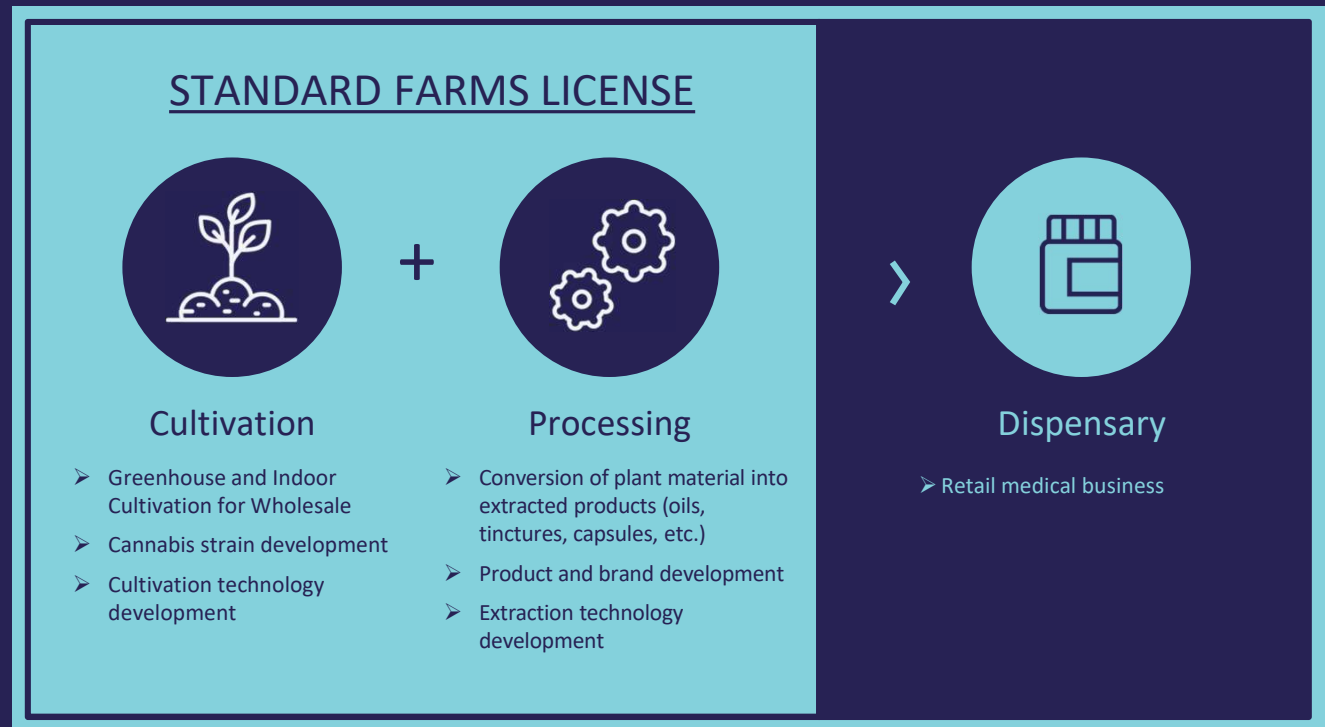
# Standard Farms Pennsylvania

GROWER AND PROCESSOR OF MEDICAL MARIJUANA



## Proven Operational Expertise

- 1 of 12 Grower/Processor Licenses in Pennsylvania
- Ranked 5 of 177 Applicants in Pennsylvania
- 1 of 7 Processor Licenses in Ohio
- Ranked 6 of 104 Applicants in Ohio
- Top Tier Execution – Second Company to Become Operational in Pennsylvania

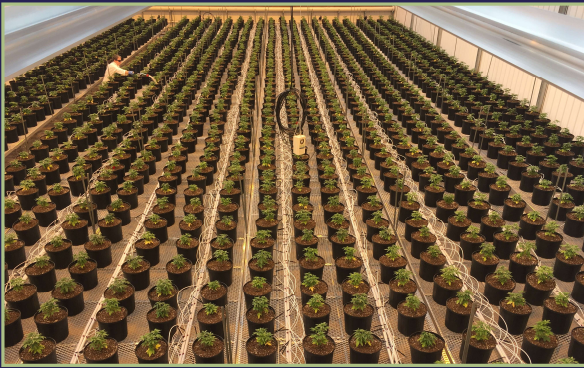




# Standard Farms Pennsylvania Facility



STATE-OF-THE-ART GREENHOUSE CULTIVATION COMBINED WITH EFFICIENT MANUFACTURING



Pre-Completion Aerial View



## Site Highlights

- 27k sq. ft. warehouse
- 16k sq. ft. Nexus greenhouse
- 10 acres of buildable land
- Ability to scale to over 100k sq. ft. of growing operations
- Strong local support
- Secluded location for discretion and security

## Strategic Location

- Easy access to key state-wide distribution routes (Hwy. 80 & Tpke. 476)
- Close proximity to mandated locations of NE PA's dispensary (Lehigh, Northampton, Luzerne & Lackawanna County) and the large population center in the Southeast of the state

# Standard Farms Proposed Cultivation Site



STATE-OF-THE-ART GREENHOUSE CULTIVATION AND PROCESSING

## Site Highlights

- Secluded location for discretion and security
- 21.5k sq. ft. processing area
- 15k sq. ft. hybrid greenhouse



# SF Team Execution Timeline



## 2017

## 2018



Awarded 1 or 7 Processor Licenses in Ohio

Replicate PA Application Model in New Jersey

Scale Existing Pennsylvania Operations

● – PROVEN EXECUTION

# Medical Impact Overview

RESEARCH HAS SHOWN PROMISE IN TREATING NUMEROUS DISEASES AND CHRONIC CONDITIONS

## Multiple Sclerosis

*"The primary efficacy analysis... showed the active preparation to be significantly superior... We conclude that this CBM [cannabis-based medicine] may represent a useful new agent for treatment of the symptomatic relief of spasticity in MS."*

- Christine Collin, MD, Senior Consultant in Neuro-rehabilitation at the Royal Berkshire and Battle Hospitals

## Chronic & Neuropathic Pain

*"The study demonstrated an analgesic response to smoking cannabis with no significant difference between the low and the high dose cigarettes. The study concluded that both low and high cannabis doses were efficacious in reducing neuropathic pain of diverse causes."*

- Barth Wilsey, MD, Director of the University of California at Davis Analgesic Research Center

## Cancer Growth & Chemotherapy

*"Cannabinoids -- the active components of Cannabis sativa and their derivatives -- exert palliative effects in cancer patients by preventing nausea, vomiting and pain and by stimulating appetite. In addition, these compounds have been shown to inhibit the growth of tumour cells in culture and animal models by modulating key cell-signaling pathways. Cannabinoids are usually well tolerated, and do not produce the generalized toxic effects of conventional chemotherapies."*

- Manuel Guzman, PhD, Professor of Biochemistry and Molecular Biology at Madrid Complutense University

Peer Reviewed Studies on Medical Marijuana (by condition treated)			
	Number of Studies		
	Positive Therapeutic Results	No Therapeutic Results	Inconclusive
Multiple Sclerosis	11	3	5
Chronic & Other Pain	6	0	1
Cancer Growth & Chemotherapy Side Effects	5	1	1
HIV/AIDS	5	1	2
Bipolar Disorder	2	0	0
Parkinson's Disease	2	0	1
Tourette's Syndrome	2	0	0
ALS	1	0	0
IBD/Crohn's	1	0	1
Nausea	1	0	0
Post Traumatic Stress Disorder	1	0	0
Psychosis / Schizophrenia	1	0	1
Rheumatoid Arthritis	1	0	0
Glaucoma	0	0	1
Huntington's Disease	0	0	1
<b>TOTAL</b>	<b>39</b>	<b>5</b>	<b>14</b>
	<b>67.2%</b>	<b>8.6%</b>	<b>24.1%</b>

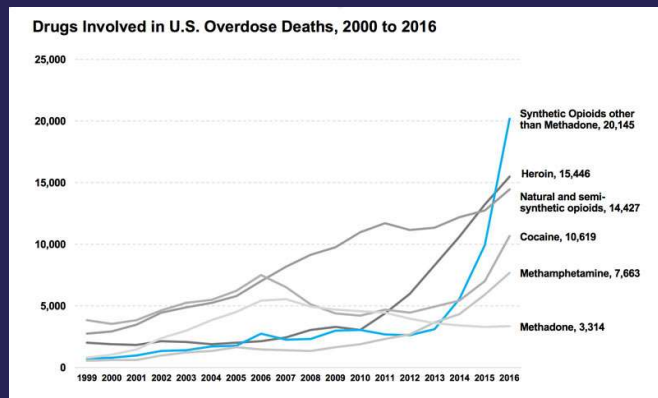
## Epilepsy & Intractable Seizures

*Results from 213 people who received Epidiolex (99% CBD) in an open label study (without a placebo control) were presented at the American Academy of Neurology April 22, 2015 in Washington DC;*

- Seizures decreased by an average of 54% in 137 people who completed 12 weeks on Epidiolex.
- Patients who had DS responded more positively with a 63% decrease in seizures over 3 months.
- In 27 patients with atonic seizures (which are commonly seen in people with LGS as well as other types of epilepsy), the atonic seizures decreased by 66.7% on average.

# Medical Impact Overview

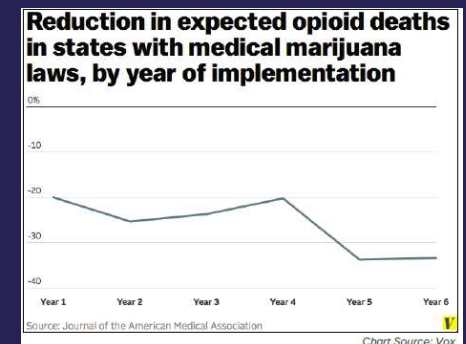
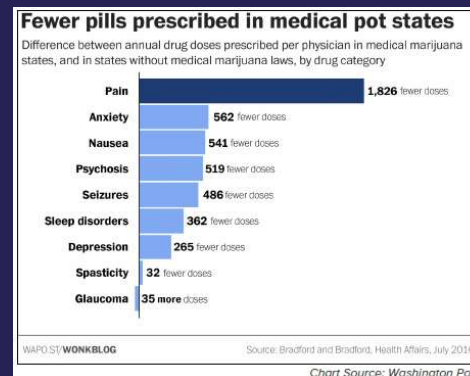
AN EFFECTIVE AND SAFE ALTERNATIVE TO THE PRESCRIPTION PAIN MEDICATION THAT HAS GIVEN RISE TO THE OPIOID CRISIS



The Opioid Crisis is reaching epidemic proportions with over 20,000 overdose deaths from prescription painkillers and about 15,000 overdose deaths from heroin in 2016

Drug overdoses are the leading cause of accidental death in the US and 60% of these deaths are due to opioids

States with Medical Marijuana Programs have witnessed a reduction in the amount of pain pills prescribed as well as the number of expected opioid overdose deaths





# Economic Impact Overview

COLORADO PROVIDES A WELL MONITORED CASE STUDY FOR THE POSITIVE ECONOMIC IMPACT GENERATED

- Increased Tax Revenue - \$247mm in 2017 and growing
- Job Creation (Direct and Indirect) – 23,407 jobs created
- Decreased Government Spending on Law Enforcement and Adjudication

Direct, Indirect, and Induced Effects for the Colorado Marijuana Industry, compared to other state industries.

Description	Type of Impact			Total
	Direct	Indirect	Induced	
Local government passenger transit	1.000	1.497	0.994	3.491
Other federal government enterprises	1.000	1.031	0.389	2.421
<b>Marijuana Retail</b>	1.000	1.029	0.369	2.398
<b>Marijuana Manufacturing and Baking</b>	1.000	0.984	0.355	2.340
Religious organizations	1.000	0.837	0.443	2.281
Architectural, engineering, and related services	1.000	0.500	0.751	2.251
Dry-cleaning and laundry services	1.000	0.442	1.033	2.475
Environmental and other technical consulting services	1.000	0.428	0.822	2.250
Promoters of performing arts and sports and agents for public figures	1.000	0.788	0.455	2.242
Business and professional associations	1.000	0.314	0.922	2.236
Offices of physicians	1.000	0.377	0.841	2.218
Independent artists, writers, and performers	1.000	0.804	0.389	2.193
<b>Marijuana cultivation</b>	1.000	0.793	0.332	2.126
Wholesale Trade	1.000	0.543	0.443	1.987
Manufacturing	1.000	0.584	0.357	1.940
Retail trade	1.000	0.522	0.363	1.884
Mining	1.000	0.292	0.497	1.789
Gambling industries (except casino hotels)	1.000	0.401	0.332	1.733
Racing and Track Operation	1.000	0.228	0.278	1.506
Amusement parks and arcades	1.000	0.273	0.213	1.486

Source: MPG calculations and comparative IMPLAN sector multipliers.

Because Marijuana is an “In-State Industry” it has one of the highest per dollar economic impacts of any industry

**Marijuana Retailing, Manufacturing, and Cultivation have a respective \$2.40, \$2.34, and \$2.13 impact within the state for every \$1.00 of revenue generated**

# Economic Impact Overview



## POTENTIAL INVESTMENT AND REVITALIZATION IN ALEXANDRIA

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- \$10mm+ of potential capital expenditure
- 60+ jobs – 80% of which will come from the local area
- Hiring of local contractors and services
- Increased local tax and property revenue from a vacant plot
- Community engagement and involvement – SF is an active member in community organizations and Chamber of Commerce